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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,948	05/09/2002	Stephen William Wales	038819.50648US	2963
23911 7590 04/27/2007 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER MEW, KEVIN D	
			ART UNIT 2616	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/27/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/009,948

Applicant(s)

WALES, STEPHEN WILLIAM

Examiner

Kevin Mew

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21 and 26-29 is/are rejected.
- 7) ☒ Claim(s) 22-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Detailed Action***

***Response to Amendment***

1. Applicant's Remarks/Arguments filed on 1/22/2007 have been considered. Claims 1-20 have been canceled and claims 21-29 have been newly added by applicant. Claims 21-29 are currently pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 21, 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugita (USP 6,041,124).

Regarding claim 21, Sugita discloses a method of associating a Training code to a Channelization code for use in a mobile telecommunication system comprising a base station and a mobile terminal, the method comprising the steps of:

selecting a Channelization code (selecting a PN code, Fig. 1),  
encoding data according to the Channelization code (encoding channel data according to the PN Code, Fig. 1),

Art Unit: 2616

selecting a Training code based on a predetermined selection process (selecting a spreading code of the pilot channel based on multiplying the PN code with a Walsh code 0, which is the PN code sent as it is, col. 4, lines 32-39),

transmitting the Training code with the data (transmitting the spreading code of the pilot channel with the channel data such as sync channel data, paging channel data and traffic channel data, col. 4, lines 10-19 and Fig. 1),

detecting the Training code (detecting PN code by PN detector 25, Fig. 2) and the data (channel data by quadrature detection circuit 24, Fig. 2), and

applying a set of rules to the Training code (detecting the timing of the pilot PN code or the spreading code of the pilot channel, col. 4, lines 55-67) such that Channelization code is known (such that the PN code is known), thereby facilitating interpretation of the data (facilitating the detection of code channel data using an appropriate timing, col. 5, lines 1-8).

Regarding claim 26, Sugita discloses a Code-Division Multiple Access telecommunication system comprising a base station and a mobile terminal using the method as claimed in Claim 21 (CDMA system comprising a mobile terminal device and a base station, col. 3, lines 55-59, Figs. 1 and 2).

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borth (USP 5,574,973).

Regarding claim 27, Sugita discloses all the aspects of the claimed invention in the rejection of claim 21 above, except fails to explicitly show a code-Time Division Multiple Access telecommunications system comprising a base station and a mobile terminal using the method as claimed in Claim 21.

However, Borth discloses a CDMA/TDMA communication system using pilot channels (col. 4, lines 17-32 and Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the radio communication system of Sugita with the teaching of Borth in having a CDMA/TDMA communication system using pilot bits such that show a code-Time Division Multiple Access telecommunications system comprising a base station and a mobile terminal using the method as claimed in Claim 21.

The motivation to do so is to provide dual-mode communications network, thereby avoiding the use of separate subscriber handsets for communications.

Regarding claim 28, Sugita discloses a time division duplex system comprising a base

station and a mobile terminal using the method as claimed in Claim 21.

However, Borth (5574973) discloses a CDMA/TDMA communication system using pilot channels (col. 4, lines 17-32 and Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the radio communication system of Sugita with the teaching of Borth in having a CDMA/TDMA communication system using pilot bits such that show a time division duplex system comprising a base station and a mobile terminal using the method as claimed in Claim 21.

The motivation to do so is to provide dual-mode communications network, thereby avoiding the use of separate subscriber handsets for communications.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne (USP 6,574,473).

Regarding claim 29, Sugita discloses all the aspects of the claimed invention in the rejection of claim 21 above, except fails to explicitly show a UMTS mobile telecommunications system comprising a base station and a mobile terminal using the method as claimed in Claim 21.

However, Rinne discloses using a pilot signal in a UMTS system (col. 2, lines 34-44, col. 3, lines 35-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the radio communication system of Sugita with the teaching of Rinne in using a pilot signal in a UMTS system such that the radio communication system of

Sugita will apply to a UMTS mobile telecommunications system comprising a base station and a mobile terminal using the method as claimed in Claim 21.

The motivation to do so is to provide a third generation radio access network communications environment such as UMTS.

***Allowable Subject Matter***

4. Claims 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claim 22, a method as claimed in Claim 21, wherein the mobile telecommunications system is operating in an uplink mode, and the method further comprises the steps of:

the mobile terminal selecting at random a Channelization code from a plurality of available Channelization codes,

the predetermined selection process being such that the Training code selected for transmission to the base station is determined by the Channelization code selected, and

the set of rules applied to the Training code upon detection by the base station being such that for each Training code detected the Channelization code used to encode the data received with that Training code is known.

Art Unit: 2616

In claim 24, a method as claimed in Claim 21, wherein the mobile telecommunications system is operating in a downlink mode, and further comprising the steps of:

the base station assigning Training codes to users in a given time slot in a predetermined assignment sequence, the predetermined assignment sequence having a spreading factor associated therewith, and

the base station and the mobile terminal having knowledge of the predetermined assignment sequence and associated spreading factor such that upon detection of the Training code by the mobile terminal the Channelization code used to encode the data is known.

***Response to Arguments***

5. Applicant's arguments with respect to claims 21, 26-29 have been considered but are moot in view of the new ground(s) of rejection.



Art Unit: 2616

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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